

WHAT IS CLAIMED IS:

1 1. A method of making fabric on a double bar warp knitting machine, with the
2 fabric having a technical face with a velour or fleece surface and a first set of appearance
3 characteristics, and the fabric having an opposite, technical back with a pile velvet
4 surface and a second set of appearance characteristics, the second set of appearance
5 characteristics of the technical back being different from the first set of appearance
6 characteristics of the technical face, said method comprising the steps of:

7 selecting one or more different pile yarns to provide the fabric with the technical
8 face having the first set of appearance characteristics and the technical back having the
9 second set of appearance characteristics,

10 the first set of appearance characteristics of the technical face selected
11 from among: depth of color upon dyeing, degree of raising, degree of air permeability,
12 susceptibility to selected dye formulation, reaction to heat, and degree of coarseness,
13 bulk, cross-section and/or denier; and

14 the second set of appearance characteristics of the technical back selected
15 from among: depth of color upon dyeing, degree of fiber straightness, degree of fiber
16 curl, degree of fiber shrinkage, degree of fiber crimp degree of raising, reaction to heat,
17 degree of yarn coarseness, bulk, cross-section and/or denier;

18 knitting a three-dimensional fabric structure on the knitting machine, said
19 structure having two fabric substrates formed from the backing and stitch yarns, each
20 defining a technical face, with a plurality of the pile yarns extending between and
21 interconnecting the fabric substrates;

22 cutting the pile yarns to separate the fabric substrates, with ends of the pile yarns
23 extending from each fabric substrate to define a technical back;

24 dyeing the fabric substrate;

25 processing the technical face of the fabric substrate by pulling pile yarns from the
26 technical back to the technical face to form the velour or fleece surface on the technical
27 face; and

28 processing the pile yarns at the technical back of the fabric substrate to form the
29 velvet surface.

1 2. The method of making a fabric of claim 1, wherein the step of dyeing the fabric
2 comprises dyeing to a solid color, and the step of selecting the pile yarns comprises
3 selecting the pile yarns to have different dyeabilities and/or dye uptakes.

1 3. The method of making a fabric of claim 1 or 2, wherein the step of selecting the
2 first set of appearance characteristics and selecting the second set of appearance
3 characteristics comprises selecting the depth of color upon dyeing, with the first depth of
4 color selected to be relatively lighter than the second depth of color.

1 4. The method of making a fabric of claim 3, wherein the step of selecting the first
2 set of appearance characteristics and selecting the second set of appearance
3 characteristics comprises selecting the depth of color upon dyeing, with the first depth of
4 color selected to be relatively darker than the second depth of color.

1 5. The method of making a fabric of claim 4, wherein the step of selecting the first
2 set of appearance characteristics and selecting the second set of appearance
3 characteristics comprises selecting a first dye for a first set of the pile yarns and selecting
4 a second, different dye for a second set of the pile yarns.

1 6. The method of making a fabric of claim 4, wherein the step of selecting the first
2 set of appearance characteristics and selecting the second set of appearance
3 characteristics comprises selecting a first material for a first set of the pile yarns and
4 selecting a second material for a second set of the pile yarns.

1 7. The method of making a fabric of claim 6, wherein the step of selecting the pile
2 yarns comprises selecting the first material and the second material to be 100% polyester.

1 8. The method of making a fabric of claim 4, wherein the step of selecting the first
2 set of appearance characteristics and selecting the second set of appearance
3 characteristics comprises selecting a pile material to provide, upon processing, a first

4 physical look on the technical face and a second physical look, different from the first
5 physical look, on the technical back.

1 9. The method of making a fabric of claim 8, wherein the first physical look on
2 the technical face is a velour and the second physical look on the technical back is a
3 shearl or crimp.

1 10. The method of making a fabric of claim 4, wherein the step of selecting the
2 first set of appearance characteristics and selecting the second set of appearance
3 characteristics comprises selecting a first dye for a first set of the pile yarns and selecting
4 a second, different dye for a second set of the pile yarns.

1 11. The method of making a fabric of claim 4, wherein the step of selecting the
2 first set of appearance characteristics and selecting the second set of appearance
3 characteristics comprises selecting a first material for a first set of the pile yarns and
4 selecting a second material for a second set of the pile yarns.

1 12. The method of making a fabric of claim 11, wherein the step of selecting the
2 pile yarns comprises selecting the first material and the second material to be 100%
3 polyester.

1 13. The method of making a fabric of claim 1, wherein the step of selecting the
2 pile yarns comprises selecting first pile yarns having first appearance characteristics and
3 selecting second pile yarns having second appearance characteristics different from the
4 first appearance characteristics, and the step of knitting comprises disposing the pile
5 yarns in a predetermined pattern comprising one or more regions of the first pile yarns
6 having the first appearance characteristics and one or more regions of the second pile
7 yarns having the second appearance characteristics different from the first appearance
8 characteristics.

1 14. The method of making a fabric of claim 1, wherein the step of processing the
2 pile yarns at the technical back of the fabric substrate comprises causing the velvet
3 surface to have a pile height in the range of about 2/32-inch to about 18/32-inch.

1 15. The method of making a fabric of claim 1, comprising the further step of
2 dyeing one or more regions of the technical face by application of dye of contrasting
3 color by wet printing techniques.

1 16. The method of making a fabric of claim 1, comprising the further step of
2 applying a chemical binder upon one or more regions of the technical face surface to
3 create regions of enhanced surface abrasion resistance.

1 17. The method of making a fabric of claim 1, comprising the further step of
2 applying a chemical resist upon one or more regions of the technical face surface prior to
3 the step of processing, for local resistance to napping and raising, thereby to create a
4 predetermined pattern of regions of low or no fleece among adjacent regions of high
5 fleece in the velour surface of the technical face.

1 18. The method of making a fabric of claim 1 or 13, wherein the step of selecting
2 the pile yarns comprises selecting first pile yarns having first appearance characteristics
3 and selecting second pile yarns having second appearance characteristics different from
4 the first appearance characteristics, and the step of knitting comprises commingling the
5 pile yarns to provide the fabric with a heather appearance.

1 19. A fabric comprising a plurality of backing or stitch yarns cooperatively
2 knitted together, and a plurality of pile yarns extending from each of:

3 a technical face with a velour or fleece surface and a first set of appearance
4 characteristics, and

5 a technical back with a velvet surface and a second set of appearance
6 characteristics,

7 said first set of appearance characteristics being different from said second
8 set of appearance characteristics; and

9 the plurality of pile yarns being processed by napping or raising, thereby forming
10 the velour or fleece surface at said technical face and the plurality of pile yarns being
11 processed, thereby forming the velvet surface at said technical back;

12 the plurality of pile yarns including:

13 first pile yarns formed of materials having said first set of appearance
14 characteristics selected from the group of appearance characteristics consisting of: depth
15 of color upon dyeing, degree of raising, degree of air permeability, susceptibility to
16 selected dye formulation, reaction to heat, and degree of coarseness, bulk, cross-section
17 and/or denier; and

18 second pile yarns formed of materials having said second set of
19 appearance characteristics selected from among the group of appearance characteristics
20 consisting of: depth of color upon dyeing, degree of fiber straightness, degree of fiber
21 curl, degree of fiber shrinkage, degree of fiber crimp degree of raising, reaction to heat,
22 degree of yarn coarseness, bulk, cross-section and/or denier.

1 20. The fabric of claim 19, wherein said first pile yarns having a first cross-
2 section and said second pile yarns having a second, different cross-section.

1 21. The fabric of claim 20, wherein said first pile yarns have a cross-section
2 selected from the group consisting of serrated ribbon and trilobal.

1 22. The fabric of claim 19, wherein said first pile yarns have a first denier and
2 said second pile yarns have a second, different denier.

1 23. The fabric of claim 19, wherein said technical back and said technical face are
2 of the same hue.

1 24. The fabric of claim 19, wherein said technical back and said technical face
2 have contrasting surface textures.

1 25. The fabric of claim 24, wherein said technical face has a raised pile surface
2 and said technical back has a sheared chamois or suede surface.

1 26. The fabric of claim 19, wherein said velvet surface of said technical back and
2 said velour or fleece surface of said technical face have different pile heights.

1 27. The fabric of claim 26, wherein said velvet surface of said technical back has
2 a pile height in the range of about 0.06 inch to about 0.6 inch, and said velour or fleece
3 surface of said technical face has a significantly lower pile height than said velvet surface
4 of said technical back.

1 28. The fabric of claim 19, wherein said fabric is jet-dyed.

1 29. The fabric of claim 19, wherein said pile yarns comprise polyester.

1 30. The fabric of claim 19, wherein said pile yarns comprise 100% polyester
2 yarns.

1 31. The fabric of claim 19, wherein one or more regions of said velour or fleece
2 surface at said technical face have color different from a surrounding region by
3 application of dye by wet printing techniques.

1 32. The fabric of claim 19, wherein one or more regions of said technical face has
2 enhanced surface abrasion resistance by application of chemical binder.

1 33. The fabric of claim 19, wherein the pile yarns are disposed in a predetermined
2 pattern comprising one or more regions of the first pile yarns having the first appearance
3 characteristics and one or more regions of the second pile yarns having the second
4 appearance characteristics different from the first appearance characteristics.

1 34. The fabric of claim 19 or 33, wherein the pile yarns are intermingled to
2 provide the fabric with a heather appearance.

1 35. The fabric of claim 19, wherein said technical face defines a predetermined
2 pattern of regions of low or no fleece among adjacent regions of high fleece in said
3 velour or fleece surface, achieved by application of a chemical resist upon regions of said
4 technical face prior to processing, for local resistance to napping and raising.

1 36. The fabric of claim 19, wherein the first pile yarns have a first set of physical
2 properties and the second pile yarns have a second set of physical properties different
3 from said first set of physical properties.

1 37. The fabric of claim 19, wherein the first pile yarns comprise a first polymer
2 and the second pile yarns comprise a second, different polymer.